Seismic Hazard Mapping Bulletin



Happy New Year from SHMP



Seismic Hazard Mapping In Southern and Northern California

The Seismic Hazard Mapping Program (SHMP) has released 106 Seismic Hazard Zone Maps covering parts of Orange, Ventura, Los Angeles, Alameda, San Francisco and Santa Clara Counties. This area covers 6,000 square miles, 160 cities and a population of approximately 13 million. The higher risk areas of Ventura and Orange Counties are completely mapped and the final 7 maps for Los Angeles County are in the Preliminary Map stage.

"We still have a lot of work to do" according to Chuck Real, Supervising Geologist of SHMP. "Several local governments-especially San Diego and some areas of Northern California - have asked to be zoned." The SHMP has identified approximately 345 communities as high-risk areas to be zoned. Riverside and San Bernardino Counties are among those on the project priority list for Southern California. "There has been aggressive support of the Act in most places," Real said. "We're not just identifying hazards; we're having a real impact on the procedures that local governments and businesses use to make structures safer."



SHMP Completes FEMA Grant

On October 31, 2003 the SHMP completed a multiyear hazard mitigation grant with the Federal Emergency Management Agency (FEMA). The Department of Conservation received \$19.4 million dollars to zone potential earthquake-induced landslide and liquefaction hazards in the Los Angeles, Orange and Ventura Counties that were declared a disaster

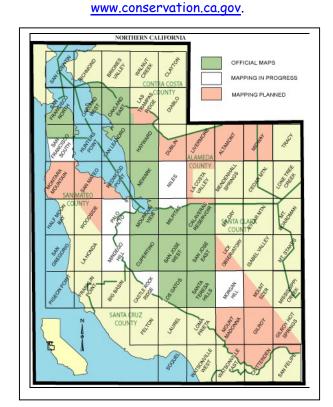
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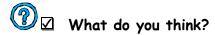
area after the 1994 Northridge earthquake. Now that the FEMA contract has been completed, the Program continues to seek funding sources to continue zoning the higher-risk earthquake areas in Santa Clara and Alameda Counties and begin zoning in Riverside, San Bernardino and San Mateo Counties.



FAQ - Will staff from SHMP visit our city/county/professional group and give a presentation of the Act and explain the requirements to our staff? <u>Yes!</u> Contact <u>Candace.M.Hill@conservation.ca.gov</u> or (916) 322-2718 to arrange a meeting.

FYI - View a 3-D animation fly-through of the Los Angeles area and ground deformation pictures of the 6.5 San Simeon earthquake at





"How well has the Act improved the safety of new buildings in your community?" Have a thought on this question? Then the SHMP survey is on the way for your input. Public safety is priority one in CGS and SHMP - the survey will be sent to cities and counties affected by the Act to help us better evaluate the Program and improve implementation of the Act. If you do not receive a survey or have questions please contact beatriz.crowl@conservation.ca.gov



Keith Knudsen Awarded Professional Fellowship

Keith Knudsen, Senior Engineering Geologist for the California Geological Survey has been selected as the 2004 National Earthquake Hazards Reduction Program-Professional Fellow in Earthquake Hazards Reduction. Earthquake Engineering Research Institute, EERI, awards this honor under a cooperative program funded by FEMA. The fellowship is designed to provide an opportunity for a practicing professional to gain greater skills and broader expertise in earthquake risk reduction.

Knudsen's research will seek to add interpretation of geologic parameters to liquefaction case-history databases, thereby developing a better understanding of the geologic nature of liquefiable materials. He will coordinate with several engineers to bridge the gap between geologists and geotechnical engineers so that both sets of knowledge can be brought to bear jointly on this problem. He will carry out his research under the direction of Professor Raymond B. Seed at the University of California, Berkeley.



Upcoming Map Releases

The SHMP will release the Official Revised Lovejoy Buttes Zone Map in Los Angeles County and the Preliminary Morgan Hill Zone Map in Santa Clara County on April 19, 2004. Additional map releases are being formulated and will be listed in the next bulletin.



By the Numbers

To date, the SHMP has received approximately 2,000 geotechnical reports from the local agenices. We will soon be conducting site visits/telephone contacts to

update our staff contact list for map releases as well as ensuring staff is aware of sending SHMP the geotechnical reports. The data in the reports will assist in updating the Seismic Hazard Zone Maps in the future.

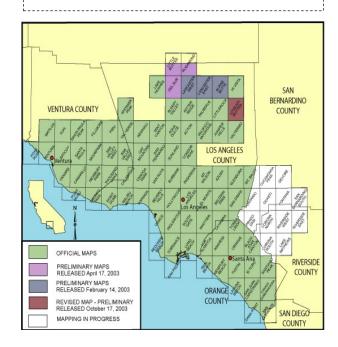


Do you need: Color maps? Black and White maps? GIS data? Fact Sheets? Special Publication (SP) 117? General CGS questions? Please contact Candace.M.Hill@conservation.ca.gov

REMINDER: SUBMIT GEOTECHNICAL REPORTS TO SHMP

Cities and Counties where Official Seismic Hazard Zone Maps have been released are required to send a copy of the approved site investigations to the State Geologist within 30 days of the report approval. Send to:

Department of Conservation
California Geological Survey
Seismic Hazard Mapping Program –
Jack McMillan
801 K. Street MS 12-31
Sacramento, CA 95814



Seismic Hazards Mapping Act (SHMA)

The SHMA directs the Department of Conservation to identify and map areas prone to earthquake hazards of liquefaction, earthquake-induced landslides and amplified ground shaking. The Act requires site-specific geotechnical investigations be conducted identifying the hazard and formulating mitigation measures prior to permitting most developments designed for human occupancy within Zones of Required Investigation.